

PLEASE ENTER AP 4/11/06

Application No.: 10/626,732

Docket No.: R2180.0164/P164

[0046] In FIG. 2, the charge control circuit 8, receiving the first, second, third, and fourth predetermined constant voltages $V1 - V4$, generates a first pre-set voltage $Vs1$ based on the first predetermined constant voltage $V1$, a second pre-set voltage $Vs2$ based on the second predetermined constant voltage $V2$, a third pre-set voltage $Vs3$ based on the third predetermined constant voltage $V3$, and a fourth pre-set voltage $Vs4$ based on the fourth predetermined constant voltage $V4$. With this configuration, it becomes possible to eliminate an extra power source to generate power to be used by the CCCV charging circuit 4. In the above configuration, the voltages are determined to meet relationships of $V4 > V3 > V2 > V1$, $V3 > V4 > V2 > V1$ and $Vs4 > Vs3 > Vs2 > Vs1$.

Amend paragraph [0047] to read as follows:

[0047] For example, the above-mentioned voltages $V1 - V4$ are set as follows:
 [[.]] The fourth ~~first~~ predetermined constant voltage $V4$ ~~$V1$~~ is pre-set to a voltage exceeding an over-discharge voltage of the lithium ion battery 11. The third predetermined constant voltage $V3$ is pre-set to a voltage, which the lithium ion battery 11 will have at a fully-charged state. The second predetermined constant voltage $V2$ is pre-set to a voltage at which a load can be activated. The first pre-set voltage $Vs1$ is set in a range of from 2.0 volts to 2.2 volts, in cases where a lithium ion battery is used.

Amend paragraph [0054] to read as follows:

[0054] When the battery voltage Vb reaches the third pre-set voltage $Vs3$, the charge control circuit 8 controls the signal switching circuit 23 to continue to output the second predetermined CCR signal $S2$ and the voltage switching circuit 24 to output the third predetermined constant voltage $V3$. Accordingly, the control circuit 26 controls the operations of the control transistor 25 such that the battery voltage Vb indicated by the signal from the voltage detecting circuit 3 is substantially equal to the third ~~first~~ predetermined constant voltage $V3$ ~~$V1$~~ and that the signal from the current detecting circuit 6 indicates that the charging current ib is substantially equal to the second predetermined constant current $i2$. Thus, the constant current charge is performed during